

PLATE I

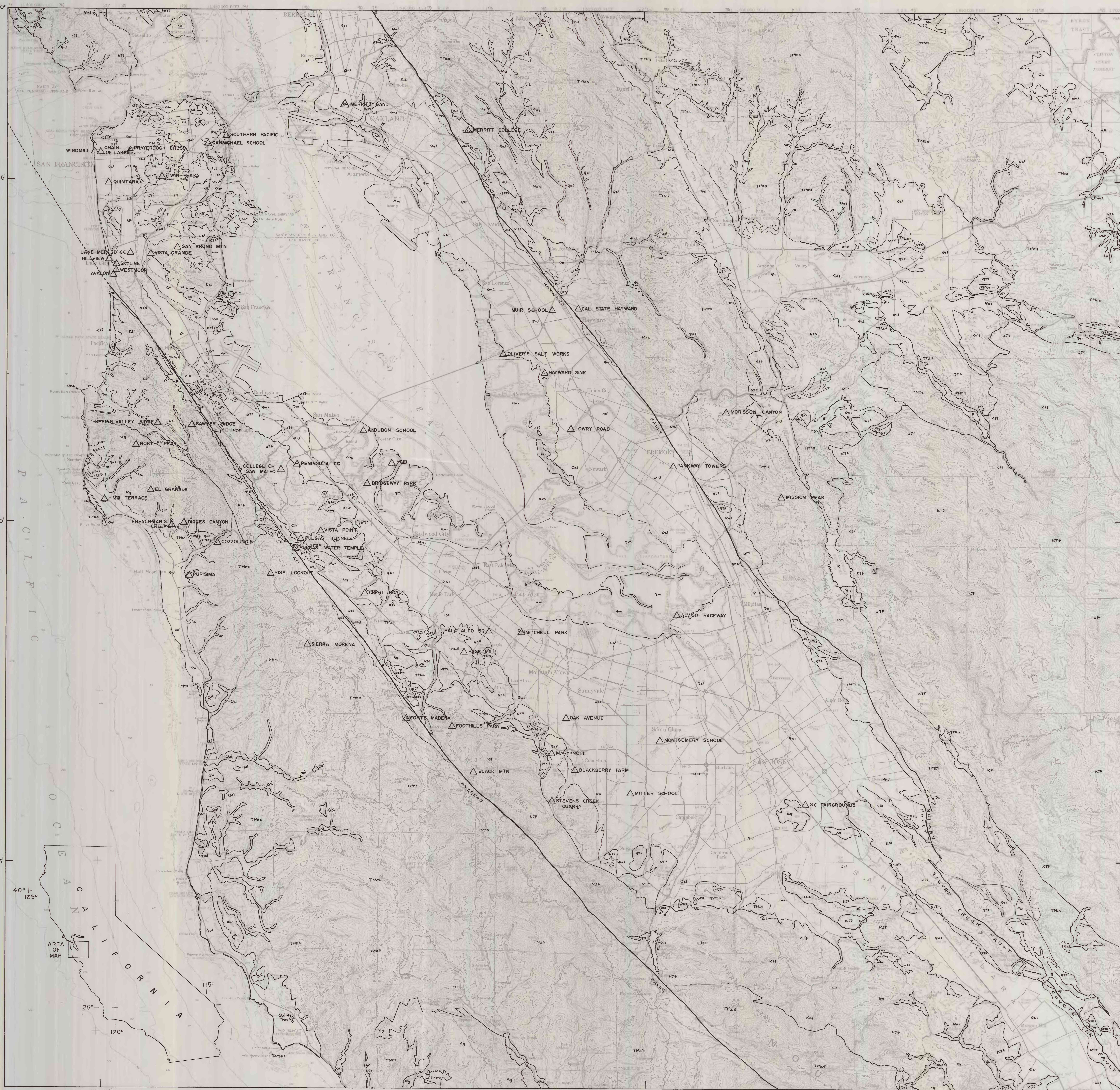
EXPLANATION

- Qm** Holocene estuarine mud:
Unconsolidated water-saturated mud.
Consists of San Francisco Bay mud,
artificial fill overlying bay mud, and
estuarine mud at the mouths of
coastal streams. 0-40 m thick.
Overlies Quaternary alluvium.
Locally overlies Franciscan Formation
in San Francisco
- Qal** Quaternary alluvium:
Unconsolidated to weakly consolidated
silt, sand, and gravel. Consists of
Holocene and late Pleistocene
alluvium
- QTS** Includes minor deposits of Holocene
and late Pleistocene beach and dune
sand, and marine terrace deposits.
0-50 m thick. Generally overlies
bedrock in valleys and canyons of
upland and coastal areas, and
Quaternary and Tertiary deposits in
the bay basin and Livermore Valley
- QTS** Quaternary and Tertiary sedimentary rocks:
Weakly to moderately consolidated
and indurated mudstone, sandstone,
and conglomerate. Consists of the
Santa Clara and Merced
Formations along the southwestern
margin of the bay basin, and the
Irvington and Livermore gravels of
local usage along the northeastern
margin of the bay basin. Strati-
graphic thickness as much as 1,500 m
but maximum depth to underlying bedrock
variable due to erosion and tectonic
deformation. Underlies younger sedi-
mentary deposits to depths of 700 m in
Colma Valley and the southern bay basin,
and to shallower depths in Livermore Valley
- TMS** Tertiary and Mesozoic sedimentary rocks:
Moderately to highly consolidated
and indurated chert, shale, sand-
stone, and conglomerate. Consists
of all bedrock units except
Franciscan Formation and plutonic
rocks. Predominantly Mesozoic
marine shale and sandstone
- Kg** northeast of the Hayward fault, and
Tertiary marine sandstone, shale,
chert, and minor amounts of volcanic
rocks in the upland areas throughout
the southern bay region. Underlies
parts of younger sedimentary units
- Kg** Cretaceous granitic rocks:
Consists of Monterey Quartz
Diorite of local usage
Quartz Diorite.
Generally jointed and deeply
weathered. Constitutes the base-
ment complex southwest of
San Andreas fault except for the
small area northeast of the
Pilarcitos fault
- KJf** Franciscan Formation:
Mostly well-indurated sandstone and
shale but includes subordinate
amounts of greenstone, chert, lime-
stone, conglomerate, and metamorphic
rocks of blueschist facies
- R** Generally highly
deformed and locally intensively
sheared with hard blocks of various
lithologies in a matrix of clay
materials. Constitutes the basement
complex northeast of the San Andreas
fault and in the small area southwest
of the fault between the Pilarcitos
fault and the San Andreas fault
- R** Reservoir or lake
- Fault** Fault

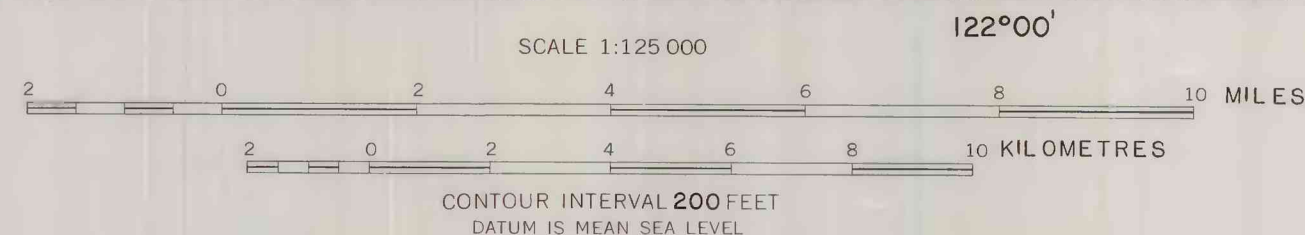
Data sources:

- Alluvial units: Unpublished map of Quaternary deposits
1:125,000 by E. J. Helley, K. R. Lajoie,
and D. B. Burke (written communication, 1974)
- Bedrock units: Unpublished compilation by E. E. Brabb
(written communication, 1974)
- Generalized geologic units compiled and modified from above
sources by K. R. Lajoie, 1974

This report is preliminary and has
not been edited or reviewed for
conformity with Geological Survey
standards and nomenclature.



Base from U.S. Geological Survey 1:125,000
San Francisco Bay Region, sheet 3 of 3



LOCATIONS OF SEISMIC WAVE VELOCITY MEASUREMENT SITES
ON GENERALIZED GEOLOGIC MAP